

# PHS MS Hybrid Sealant

PHS MS Hybrid Sealant is a high performance, flexible and stable single component adhesive and sealant based on hybrid polymer technology. It is a single part, moisture-cure adhesive/sealant that requires no mixing or activating and provides excellent adhesion properties.

PHS MS Hybrid Sealant is used for general purpose bonding on a wide variety of materials as well as for applications such as sealing of seams and joints in construction (including glass and mirror constructions) and the sealing of interior and exterior expansion and connecting joints.

PHS MS Hybrid Sealant is suitable for following applications:

- Boat / ship building (decks, floors, panels etc.).
- Automotive industry (car body assembly, buses, containers etc.).
- Window and door frame perimeter joints.
- Vehicle conversion, caravans.
- Construction and building joints including floor and concrete joints.
- Bonding applications in metal constructions and for mounting vibrating parts.
- Good adhesion to many substrates (including PVC, EPDM, glass, wood, stone)



## Advantages

- Multi-purpose adhesive sealant.
- Single component - no need to mix and easy to use.
- Isocyanate, solvent and silicone free.
- Chemically neutral.
- Suitable for bonding glass and mirrors (in accordance with DIN1238).
- Good resistance to tear and weather.
- Elastic compound which accepts movement.
- Excellent resistance to chemicals and seawater.
- Can be over painted when fully cured (in accordance with DIN52452 Part 4).

## Technical Data

Colour	Black
Base	Hybrid polymer
Consistency	Tixotropic paste
Specific Gravity (20C)	1.50
Skin Formation Time (20C and 50%RH)	Approx. 40 minutes*
Cure Rate (20C and 50%RH)	3mm / 24 hours*
Temperature Resistance	-40C to +90C
Application Resistance	+5C to +40C
Compatibility with Paint (after curing)	Water based paints: Yes
Coverage (per 300ml cartridge)	15 meters (5mm bead) 3 meters (10mm bead)

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## Product Performance

The performance data presented here has been determined by Passive House Systems standard test methods and are average values that should not be used for specification purposes. Our recommendations on the use of this product are based on tests believed to be reliable. It is advised that users conduct their own tests to determine the suitability of the product for their specific application. Please note this product is not recommended for substrates like PE, PP, Teflon.

Maximum Shrinkage (DIN reg. 52451)	4.5%
Elongation at Break (DIN reg. 53504-S2)	350%
Tear Strength (ISO 34)	Approx. 9.00 N/mm <sup>2</sup>
Shore Hardness	Type A: 50
Max. Tensile Strength (DIN reg. 53504-S2)	1.70 N/mm <sup>2</sup>
100% Modulus (ISO 37)	1.10 N/mm <sup>2</sup>

## Handling and Application

The general application information presented here is based upon typical conditions determined by Passive House Systems Sealants own testing. Our recommendations on the use of this product are based on methods believed to be reliable. It is advised that users conduct their own tests to determine the suitability of the product for their specific application.

1. All substrate surfaces should be cleaned of any dust, grit, loose material, wax, grease and oil.
2. Joint edges should be protected using masking tape.
3. Cut the tip of the nozzle at a 45° angle to give a slightly larger hole than the gap that has to be filled.
4. PHS MS Hybrid Sealant can be applied by a pneumatic or hand gun under a uniform pressure to extrude a continuous smooth bead.
5. After application, the sealant can be finished by using a wet spatula. The tape should be removed as soon as possible before formation of a skin.
6. The rate of cure in the joint is dependent on the ambient conditions, the assembled joint arrangement and the depth of the sealant between the joint faces.
7. Clean tools immediately after use. Clean hands with a proprietary hand cleaner.

## Health and Safety

MS Hybrid Sealant is classified as non-hazardous according to Directive EC 1272/2008. Please refer to the Safety Data Sheet for further health & safety information.

## Storage

MS Hybrid Sealant should be stored in its original container, in dry conditions and at temperatures between 5°C and 20°C. MS Hybrid Sealant will keep satisfactorily for up to 12 months from date of manufacture if stored according to the recommended conditions.